NY Times Sunday magazine

Response to reporter inquiry (Clare Howard, freelance, for NYT)

I have been researching and writing about pesticide drift with a grant from the George Polk Investigative Reporting center funded by the Ford Foundation. I was never able to get an interview or a statement from the EPA through Andra Belknap. Could you help me? It seems important to include a statement from the EPA regarding pesticide drift. My story is structured around two narratives, an organic farm family in Central Illinois getting drifted on by surrounding chemical fields. Using Pesticide Action Network's Drift Catcher, the family recorded chlorpyrifos drift, especially concerning because the family has three young daughters. The other family is in Blachly, Ore., and they are getting drifted on by helicopter applications of pesticides on clearcut timberland. People in that community had urinalysis testing and everyone tested was positive for atrazine and 2,4-D in their urine.

Could you send me a statement explaining the EPA's position about measurable pesticide drift that is making organic farming in this country increasingly difficult. What about pesticide drift that returns to earth in rain and literally affects everyone rural and urban. A toxicologist at University of Wisconsin in Madison told me the EPA inadequately tests pesticides for neurological, endocrine, developmental, immune and epigenetic damage. Could you respond to that?

EPA Response:

Pesticides must be registered by EPA before they may be sold or distributed in the United States. EPA makes decisions on the registration of a pesticide based on data demonstrating the potential for the pesticide to affect humans, the environment, and wildlife. The Agency uses these data to conduct risk assessments and determine whether a pesticide meets the statutory standard for registration – that is, whether the pesticide can be used without causing unreasonable adverse effects on human health and the environment. In order to gather sufficient information for such determinations, EPA requires more than 100 different scientific studies and tests from applicants. Toxicology (including neurological, endocrine, developmental, immune, and mutagenic effects), dietary exposures, environmental fate and transport, and ecological effects are all important components of EPA's risk assessments. The Agency also focuses in particular, among many other things, on the risks to bystanders and the environment that might result from spray drift. Once a pesticide is registered, it is legal to use only when used according to the specific label directions for the product. The label is the law, and use that is inconsistent with these directions is considered misuse and a violation of law. While EPA has the responsibility to regulate use of the pesticide through registration and labeling, investigating cases of pesticide misuse is primarily the responsibility of state enforcement officials.

The Agency's decisions on pesticides once they are registered also depend on the evaluation of scientific information and comparison to the statutory standard of "unreasonable adverse effects." In 1988, EPA began a comprehensive program to update the scientific basis of the registration decisions on older chemicals, consistent with modern scientific standards. The systematic updating of pesticide risk assessments continues today, with EPA's Registration Review program, in which each pesticide is scheduled to be re-evaluated on a 15-year cycle to determine whether it continues to meet current scientific and regulatory standards. The Agency

tracks the evolution of the science to assure that decisions about pesticides are based on the most current understanding of the health and environmental impacts associated with their use.

The Agency is concerned about the potential for pesticide use to cause adverse effects. Although the great majority of pesticide applications take place without resulting drift problems, EPA recognizes that there is a need for preventive action to reduce the incidence of drift. Therefore, we are currently pursuing several initiatives to reduce the unwanted impacts of pesticide drift, which is defined as the movement of pesticide droplets or particles through the air from the site where the pesticide is intentionally applied to any other site.

The Agency is actively working to address the problem of drift through a variety of efforts including strengthening pesticide labels, updating the Agency's risk assessment methodologies, and examining the risks from long-range transport of pesticides. As an example, EPA has begun using a new method for estimating the risks posed by drift for bystanders and analyzing the degree of protection afforded by various risk reduction measures. The Agency is also engaged in developing a "Drift Reduction Technology" program for identifying new ways to reduce pesticide drift, which might include such things as pesticide additives, modified application equipment, or environmental sensors. On a larger scale, the periodic re-evaluation of pesticides in Registration Review will provide opportunities for re-examining drift on a chemical-bychemical basis.

Chlorpyrifos, the insecticide implicated in the drift incident in Central Illinois, is currently under review through the Registration Review program. The chlorpyrifos database is being upgraded and today's scientific standards and methodologies will be used to evaluate and mitigate any associated risks. The Agency recognizes that reports of drift incidents may often be associated with local land-use choices made by different landowners operating in proximity to each other. Consideration of differing land uses has been one element in EPA's efforts to improve pesticide labeling with respect to drift. In the case of the organic farmer and his family, enforcement officials in Illinois would have the primary authority for investigating and enforcing pesticide laws. The response of these officials would be based on local and state laws as well as the requirements or restrictions from the labeling of the product involved in the incident.

The Oregon Health Authority (OHA), the Centers for Disease Control, and the Oregon Departments of Agriculture and Forestry are currently investigating the nature and extent of pesticide exposures among the residents of Blachly, Oregon, and other communities within the heavily logged Triangle Lake area of Western Oregon. EPA is providing technical assistance to the investigation, which was triggered by the concerns of the local citizenry. In August and September of 2011, samples were collected of urine, drinking water, soil, and locally grown food from 66 individuals in 38 households in the Blachly area for analyses for pesticide residues, including those of atrazine and 2,4-D, two widely-used herbicides. The results of those analyses have not yet been released.

EPA has rigorous, science-based approval and re-evaluation processes for pesticides that ensure products will not cause unreasonable adverse effects on humans and the environment. The Agency is constantly strengthening its programs to improve protections, and there are numerous

ongoing activities within the Agency to enhance the understanding and control of the potential risks associated with pesticide drift.